

# EXHIBIT 31



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**Smith et al.**

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(54) **MULTIPLE WAVELENGTH SENSOR  
EMITTERS**

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(2013.01); *A61B 5/1495* (2013.01);  
(Continued)

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(58) **Field of Classification Search**

None

See application file for complete search history.

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U.S.C. 154(b) by 0 days.

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(Continued)

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#### **Related U.S. Application Data**

(63) Continuation of application No. 16/437,611, filed on  
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(Continued)

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(57) **ABSTRACT**

A physiological sensor has light emitting sources, each  
activated by addressing at least one row and at least one  
column of an electrical grid. The light emitting sources are  
capable of transmitting light of multiple wavelengths and a  
detector is responsive to the transmitted light after attenu-  
ation by body tissue.

(52) **U.S. Cl.**  
CPC ..... *G16H 40/67* (2018.01); *A61B 5/0022*  
(2013.01); *A61B 5/0205* (2013.01); *A61B*  
*5/0261* (2013.01); *A61B 5/0295* (2013.01);

**29 Claims, 48 Drawing Sheets**

